1:Marshall E-5 (1952-1953) 1959 FX10 Bushmen FX10
Kung

logical father, as well as his mother's husband, should do something nice for him. Perhaps when he receives his first assegai his begetter will give it, for that is a very proud thing—but we do not know what the future holds for these people or where they will be by then.

The dominance of men

Wives are much desired by the young men, who usually wait for years for their infant fiancées to grow up, and by men who want second wives, and by widowers. /Kung women are not only precious as mates, they are the food-gatherers and supply more of the daily food than the men do. Hunting[1] is very arduous in the Kalahari and the hunters succeed in bringing a big meat animal to the werf only about once or twice a month. Meanwhile women have dug roots and gathered berries and the other wild plant foods to feed their families every day. /Kung women in their two roles make a very great contribution.

In /Kung society, however, the magnitude of their contribution does not make women dominant. There are factors which bring the men forward clearly into dominance and leadership.

The primary factor is undoubtedly strength. /Kung men are small and slender, but they are wiry and vigorous. With their strength they carry and protect the very life of their people. When they swing their weapons and implements and their small children on to their shoulders and stride out in front of the women, the image seems to reveal, as vividly as if a great artist had painted it, how the laden following women are borne up by the strength of their men and take heart from them.

Another factor which brings men clearly forward is the character of hunting and its reward. Women bring the daily food, but there is only drudgery in digging and picking in the hot sun and trudging back in the early evening to the werf with heavy roots and berries and babies all sagging in the pouches of their karosses, a small dead tree or two on one shoulder for the night fire, possibly another child astride the other shoulder. Many of the vegetable foods, furthermore, are rather tasteless and harsh and are not very satisfying. There is nothing splendid about returning with vegetables and wood. The return of the hunters is vastly different. The intense craving for meat, the anxiety that goes with the hunt, the deep excitement of the kill, finally the eating and the satisfaction reach to the very core of the people, engaging powerful emotions. Once, when an eland had been killed and the hunters were sighted with the meat on their backs, moving in a dark, lumpy, bobbing line in the golden grass, we heard the sound of voices in the werf rising in volume and pitch like the hum of excited bees. Some people ran toward the hunters, others crowded together at the edge of the werf, some danced up and down, the children squealed and ran about, the boys grappled and tussled together. The motion and sound had the effect of a vibration. Another time a young man who was said to be the best hunter in the region (/Qui Hunter we called him, his people called him Short /Qui), had been charged by a magnificent cock ostrich on a big open pan where there was no refuge. He knelt facing the creature till it was within close range and shot an arrow straight

[1] John Marshall has described /Kung hunting in his film, *The Hunters*, Peabody Museum Film Study Center, Harvard University, and in 'Man as Hunter', *Natural History*, the magazine of the American Museum of Natural History, New York, vol. lxvii, No. 6, June, and No. 7, August, 1958.

[20 cont.]

648 put themselves under a chief, a Herero half-breed named
621 Krüger, whose position was acknowledged" (see p. 87). "In
622 Naidaus a Bushman leader named Aribib introduced himself, who, like Krüger in the east, was recognized as the captain of the Bushmen in the west" (p. 88).

114 "During the journey of Captain Volkmann in the year 1902 to the Okovanggo, the !Kung Bushmen provided extensive help. Volkmann describes these !Kung in the following manner:
147 'The Bushmen, who are almost totally naked, are very sensitive to the cold. In the morning each Bushman has a burning log in
372 his hand, which he holds close to his chest. The other hand is placed on the shoulder with the upper arm pressed close to the body. At the resting place the log is used immediately to make
481 a fire. When a Bushman walks in front of the horse as leader, he
222 springs with incredible speed, now here and now there, to get a tuber or root out of the ground. Various berries growing on low
276 shrubs are also very popular. Anything that can serve is used as a tobacco pipe: kudu horns, calabashes, hollowed fruit of the Strychnos, old metal cartridge shells, and so forth. Most of all they like to smoke through water, which is never renewed. When they run out of tobacco, they boil the bark of a tree in the thick tobacco water, dry the bark, which has some tobacco taste, and smoke it' " (p. 180).

101 F. Seiner reports the following concerning the divisions
131 of this tribe:

"The Kung, to the best of our present knowledge, are divided into four groups. The western group seems to extend from the Portuguese border near Kurinkuru along the route via Tschitschib to the Omuramba u Owambo and then seems to be bounded by the latter and in the east by the line Nuragas--Blockfontein. The Karakuwisa group bordering them to the east inhabits the valley of the Omuramba u Omatako from Karakuwisa to Blockfontein during the dry season, and during the rainy season also the steppes 100 to 150 kilometers east and west of the Omuramba and the latter itself up to the Kanovlei. The more southerly group extends from the latter in the Omuramba to around Osondema; we shall call these Nog-au, who have already settled in the central Kalahari and can scarcely be classed with

!KUNG

[21 cont.]

157 them thought of asking a question about it. The Bushmen of today at least do not believe that any kind of magic is concealed [177] in the Europeans' machines. They learn to use European instruments fairly quickly; in particular, they soon become familiar with the rifle. Dornan reported that there was a large number of improvised rifles that the Bushmen had adapted. In a new environment, the Bushman is wholly self-possessed and coolly observant. He is highly adaptable. The girls, of whom a [648] number are kept by farmers as concubines, are quite skillful at [177] housekeeping. In Ovamboland they quickly adopt the living habits and economic activities of the Bantu. An Ongandjera Bushman acts as an instructor at the teacher's college in Oonipa. He owns a small kraal that is well-maintained in Ovambo fashion and, in addition, has built himself a round hut of tiles in which [648] he keeps his "library." They seldom stay long on the farms, but [147] probably in the main because the food does not agree with them. 609 The Bushmen are most distrustful of other people. Every armed person whom they encounter is regarded from the outset as an enemy. The Bushman is allowed to enter the regions of other tribes only if he is unarmed. Even along the edge of the farm zone the mutual distrust is so great that a Bushman who has been sent to a farm as a messenger dares not leave the road, which is regarded as a neutral zone, if another kin group has settled in the vicinity. If two armed Bushmen who are strangers approach each other, they disarm at first sight before they greet each other. When a Bushman comes to a village or to a farmhouse, he will put down his arms at a certain distance and sit down to wait patiently, if need be for hours, until he is questioned. A 186 609 distinct sense of race is not apparent. Everything that does not belong to one's own kin group is regarded as strange, even hostile, except when common persecution causes a sense of solidarity to spring up among all those who are persecuted. At the same time, they very clearly possess a kind of sense of humanity as a whole, that is, they do not believe that they are the only people, and they are convinced, for example, that the people of all races are received in the heavenly house. Their 602 conduct toward relatives is regulated by numerous customs, but in general it is formal and almost ceremonial, even toward the [593] wife and children. The Bushman is never importunate. [157]

[22 cont.]

114 without compromising oneself. Only old people are suitable
124 informants, since they are no longer eager for renown.

831 In view of the hard life that the people lead, sexuality, naturally, is not excessively developed. Perverse manipulations are evidently unknown, since my informants did not even understand questions on this subject.

833 Normal sexual intercourse is usually performed in the bush during the time between the evening meal and the rising
271 of the moon. Long periods of thirst result in almost total im-
147 potence.

157 Despite all the formality, they have an unbridled
578 temperament which frequently expresses itself in violent emotional explosions over trivial affairs, which then may easily lead to serious consequences since the poisoned arrow is always at hand. For example, I was told the following story: A Bushman worked on a farm for quite a long time and, with his belly fat from eating maize, came to visit his thin companions. His brother made fun of him for being so fat, saying that he could not run any more, whereupon the fat one retorted: "Just the same, I'll live longer than you." After this brief exchange of words, the scrawny brother stabbed the fat one. -- A film com-
157 pany once wanted to make a film among the !Kung who are
648 settled behind Keibeb; the film was to be called: "When the First Whites Came into the Land." The chief of this horde had a [23] pair of old German military trousers as an emblem of his office and when he was requested to take them off, he responded with the declaration that he would take off his trousers only if the White did the same, whereupon he received a box on the ears that put him and his companions in such a rage that the film company preferred to depart in order to avoid a catastrophe.

157 That they can also be quick at repartee is shown by the following story which was repeatedly told to me by Europeans: A Bushman had been accused of poaching. The magistrate asked him: "Don't you know that these animals belong to the king (royal game)?" The Bushman answered: "I saw no 'brand' (property mark)."

As a chief or family head, the Bushman is bossy and
[593] unyielding, which is understandable in view of the rigidity of his whole conception of life. The sick Bushmen lie silent and

[25 cont.]

481 recognizable -- a characteristic that during the old Bushman persecutions cost many thousands of these unfortunate and peculiar hominid creatures their miserable existence. The walk of the Sanides is also peculiar; they do not walk, they prance. Out of habit they always raise their knees and feet as though they were walking among the sharp grasses and thorn bushes of their homeland. This, like the swaying walk of sailors, is of course, a secondary, acquired characteristic, not a racial one."

I prefer, nevertheless, to regard the walk of the Bushmen as somewhat racially conditioned.

516 The sitting position of the Bushman is the squatting position that is practiced by so many primitive peoples and was probably at one time universal among mankind. At the same time, their position differs from that of the Blacks, insofar as the latter usually squat in such a way that the bones of the ischium do not touch the ground, whereas this is the case among the Bushmen. As a result, when they squat, they bend their backs quite far and must spread their legs apart.

513 When sleeping, the Bushman lies rolled up on his right or left side. The children all cuddle up to the mother to sleep.

● 147 The muscle power of the Bushmen is very weak. The dynamometric measurements that I carried out show that the pushing power of adult men is less than that of European working women; it only amounts to between 30 and 40 kilograms, whereas European women achieve approximately 60 kilograms, men engaged in light work average 80 kilograms, and European heavy workers and the smiths among us reach an average of 120 and more kilograms. Black heavy workers attain an average of only 80 kilograms. Thus, the Black on the average is twice as strong as a Bushman, and the White is three times as strong.

At the same time, there is no essential difference between the sexes among the Bushmen themselves.

[25 cont.]

147 481 Similarly, the strength displayed by the Bushmen in using the bow is by no means impressive. While their momentary efficiency is low, their endurance in marching is great. In 1916 when the farmer Schwarz in Neudesenberg (Keitsas) was sick with black water fever, the farmer's wife sent a Bushman to Grootfontein for a bottle of champagne. The man left in the forenoon and returned around midnight. The distance was at least 100 to 120 kilometers, for the highway, which has few detours, is 90 kilometers long. (Informant: Farmer Schwarz in Duwib.)

4. Physical Types and Constitution

142 The Bushmen are a distinctly human type of savage with very gracile bone structure. A group of them that I designate as South Khoin is the only form of human being adapted to desert life, or in any case is the form best adapted to it.

The type that has developed there can in no way be subsumed in our physical type schema. Since this same type to a considerable degree is also involved in the composition of the northern forest Bushmen, there are naturally a great many individuals whom we cannot classify at all in our sense. At any rate, however, we can -- and here I am anticipating some of my anthropological conclusions -- differentiate among both sexes of the !Kung a longitype and a brachytype. Especially among the women it is almost always possible to differentiate the "chubby youthful form" from the so-called future form.

In another place I have defended the view that the athletic type should be regarded as the true normal-type, and that this type has the innate ability to accumulate a moderate amount of fat. The muscular-respiratory type with a slighter development of the skeleton and musculature does not possess the ability for a great accumulation of fat, whereas the digestive type with slightly developed musculature has a great ability to accumulate fat.

[26] From the athletic type a continuous series leads through the respiratory and digestive forms to the tall-asthenic and short-asthenic types and from there to the decided weaklings.

[44 cont.]

Toothache

142 I rarely saw irregularities in the position of the teeth, and
[515] never protruding or receding teeth. The only care given the
teeth is the use of iron arrow points for toothpicks. The teeth are
usually yellow, covered with dense layers of tartar, and because
of the sand content of the vegetable diet, are quickly worn down
164 by chewing. Caries are extraordinarily common, but infections
also occur through the exposure of the root canal as the teeth are
753 worn down. If a person has a severe toothache, //Gauab has stuck
a needle into it, and the doctor must be called to get it out. If
there is no general discomfort, however, then no dsao are there.
757 A little piece of wood is sharpened to a point at one end, held
with the point against the root of the tooth, and then the tooth
is knocked out with a stone. This instrument is called "oie."
147 Small children suffer considerable pain when they teethe; some-
753 times dsao (spirits of sickness) are also at work in this case. [Fig.
17 appears here.]

Sore Throat

753 A sore throat means that //Gauab has made a cord and is
755 drawing it tight around the patient's neck. The doctor must re-
move the cord from the patient; it is about 30 centimeters long
and is like the trap cord (//kao); everyone can see it after the
treatment.

Colds (X'õã)

164 Grippe takes many victims among the Bushmen every year,
513 especially among those who are already tuberculous. In winter,
colds are extraordinarily frequent, since the people lie almost
naked around the fires. In the forest they are fairly well protected
against the wind, but on the open plain the wind changes its di-
rection at night while they are asleep, so that they not only catch
cold but often receive severe burns around the stomach -- although
this applies only to the men; the women sleep at a greater distance
FROM THE FIRE.

Gastrointestinal Disorders

753 It is interesting to note that the doctrine of the importance [171] of the liver and gall bladder in the origin of disease, which we find among all primitive and civilized peoples up to the humoral medicine of the previous century, is already present among the Bushmen. When the gall bladder is full, one becomes sick and [755] vomits gall. Then the region of the liver is massaged, just as is [164] done in the case of liver pains. Enlargement of the liver as the result of chronic malaria is common. The moon, which dies [821] every month, also has gall sickness, and moonlight is the juice of the gall bladder vomited by it. Moonlight and gall are known [164] by the same word (goo). Spleen tumor is especially common 757 among children. They have no medicine against splenalgia. 278 They have no medicine for inducing vomiting. It is induced by putting the finger or a feather into the mouth. To stop vomiting, one chews little twigs of the goro tree. The bitter wood of the liana (χ'ãã-χ'ãñ) is chewed for stomach-ache. In case of con- [753] stipation the doctor must practice magic, for it is assumed that [755] the dsao have tied the stool in the intestine, and the doctor must loosen and extract the cord, just as in the case of an inflammation of the throat. The patient may not eat anything and drink very little. In case of diarrhea, even the bleeding kind, the same medicine is taken as in the case of stomach-aches. Intestinal ●147 worms are unknown. We already know from earlier reports that the 262 gastrointestinal tract of the Bushman can take all kinds of things that we cannot take. As the result of habituation from early child- hood on, he can digest meat that has gone bad and the like without any trouble (1). After a long period of hunger, he can consume

1. I myself witnessed a drastic example of this. I had brought a side of bacon from Swakopmund, which supposedly had been preserved for all eternity according to a special process. When I brought it out, it had a hideous smell, and in order to prevent the Bushmen from taking it and getting sick, I had it hung high on a tree. The

[45 cont.]

147
262

Bushmen stared longingly at the discolored lump of fat. Finally they sent a deputation to me, saying that they wanted the bacon for their dogs. The moment they received it, it was skillfully divided according to families and consumed in the course of a great feast, without any harmful effects.

enormous quantities, but such excesses as a rule are followed by an indisposition. The day after a major feast, almost all of them lie in the sun with stomach-ache and gripes. In other words, even a Bushman should not be credited with the impossible with regard to food; many things that seem repulsive to us, such as earthworms, lizards, thick grubs, mice, and the like, are in themselves not at all harmful to health, especially since the Bushman only eats them cooked or roasted. Bushmen who have grown up on the farms can take the same diet as the Whites or Blacks. On
147 the other hand, the wild Bushmen who have grown up on veldkost
262 and the flesh of wild animals cannot accustom themselves to the
648 work and prison diet of the Blacks. A term in jail of any great length means condemnation to a slow but sure death for most Bushmen. The prisoners show the symptoms of vitamin deficiency, become infirm, get edemata on their legs, dropsy, and unfailingly perish. In the initial stage severe sluggishness of the bowels sets in. Ample portions of fresh meat can keep the Bushman healthy even in imprisonment. The fact that Bushmen run away from the
[464] farms is based in most cases upon their inability to endure any
[146] longer the diet given them. The vitamin need of the Bushman who has grown up in the wilderness is undoubtedly much greater, and his longing for meat, which often appears pathological, can be explained as a physiological craving for vitamins.

Diseases of the Urogenital System

164 Catarrhs of the bladder occur; in such cases a flat stone
(755) is warmed in the fire and placed on the bladder region. Hematuria, evidently the result of nephritis, was twice treated by my friend

/244 cont./

Indices

	Men	Women
141 I. Skull index	76.3	73.5
II. Average index of the skulls of all adults measured	74.77	
III. Physiognomic face index	76.44	76.1
IV. Physiognomic nose index	102.5	97.44

147 [146] The state of nutrition of those examined may in general be called inadequate, and the amount of fat slight. Even among younger individuals the skin is strikingly slack and can be grasped in wide folds. One has the impression that there is a connection between this slackness of the skin and the extreme fluctuation in the saturation of the tissues, which is the rule since the Bushmen experience frequent and long-lasting thirsts. The men assured me that they could march without water for four days in great heat, a statement which surely deserves to be credited.

142 The skin color of all those examined, with the exception of two in whose case racial mixture is a possibility, is a brown of medium tone shading over into yellow.

The palms of the hand and soles of the feet are a lighter color, but do not show such a striking contrast with the back of the hand as is the case among the Bantu /245/ Negroes. The skin of the chest and abdomen has a slightly darker coloration than that of the face. Scars are very common, especially on the chest and abdomen, and [513] usually stem from burns to which the Bushmen readily expose themselves by sitting and sleeping near the open fire. These scars have a lighter tinge than the surrounding skin and look almost pure yellow.

The iris of all those examined is deep brown in color.

Compared with Europeans, the hair growth of the Bushmen is very modest. It is confined almost entirely to the skull; beards are found only on a few men and even then they are sparse. Hair elsewhere on the body, including the arm pits and pubic hair, is practically nonexistent.

The color of the hair on the head is a deep black. The individual hairs grow to a length of about four centimeters for men and about six centimeters for women. The hair is fine and curled in a spiral. The curvature radius of the spiral amounts to about two

/246 cont./

304 3. The third and most curious is a manner of tattooing which I should like to designate as the antelope tattoo, a kind of inoculation that I have seen in no other native African tribe. This type of tattoo is used only by males and consists of the following:
[827] Through parallel incisions little pieces of antelope flesh, especially gemsbok flesh, are placed under the skin of male children, with the idea that the child thus inoculated will have the speed of the antelopes in running. The incisions are most commonly made on the buttocks, but they are also to be found on the chest, abdomen, and back.

757 One also commonly finds scars all over the body from blood-letting incisions "to draw off" illnesses.

142 Viewed from above, the head shows no peculiarities, although dolichocephaly does not seem to me to be as marked among the Bushmen as it is among the Bantu Negroes. The protuberance at the back of the head is so little developed that it can scarcely be felt on most individuals.

The profile view of the face permits one to recognize a clear alveolar prognathy. In the case of most individuals the upper lip in the profile view extends beyond the tip of the nose. The edge of hair around the fairly straight forehead runs in an even curve from one ear to the other.

The bones of the eyebrow arches protrude sharply, while the forehead bulge is only slightly developed.

The cheekbones with the widely-projecting zygomatic arches form prominences jutting out sharply in the temporal and cheek region.

142 Most Bushmen show a striking prominence of the parotid gland
147 region, which in the case of some individuals swells out so that it is actually hemispherical. I was unable to determine whether the swelling is caused more by hypertrophy of the parotid gland or by a particularly strong development of the chewing musculature. This swelling of the parotid gland region is, I believe, not a racial peculiarity of the Bushmen, but rather a consequence of their way of life which necessitates a root diet requiring very heavy use of the chewing apparatus. At any rate, I observed the same peculiarity among the Herero, who for a long time were dependent upon veld food.

/246 cont./

142 The Herero, like the Bushmen, give the use of veld food,
147 especially the onion known as unki, as the cause of this peculiarity.
171 The attached photographs illustrate the swelling in the case of a Bushman (Fig. 3) and a Herero (Fig. 4).

142 The nose is sharply set off from the forehead and strikingly small. The bridge of the nose is so flat that in some cases one can scarcely speak of a bridge of the nose; the area between the cheekbones is an almost level surface. The tip /247/ of the nose is small and pointed slightly upward. The largest diameter of the nostrils runs diagonally. The lips are narrow in comparison with those of most Negroes; their color is almost exactly that of the surrounding skin of the face.

The teeth of the majority of individuals are in pretty good condition; among the 39 persons I examined, I found only 28 carious teeth. In comparison with a European, the extreme wear of the teeth is striking; it progresses with age and is so marked in old people that the teeth are worn down to the roots, again a consequence of the way of life dependent upon a root diet. The incisors very slightly point forward.

304 The Heikum do not have artificial deformities of the teeth.
648 Several of those examined displayed the well-known Herero deformity (filing down the inner sides of the two central upper incisors and removal of the four lower incisors) [Figs. 3 and 4 appear here], which is explained by the fact that these Bushmen had been Herero slaves in their childhood and were marked in the Herero manner by their former masters.

142 The ear is of normal size; its outline is rounded, not bent at an angle. The ear lobe is always joined to the head.

In spite of general gauntness, the marked development of the abdomen in most cases is striking, even among the adults.

The female breast is conical in the case of individuals who have not borne children; the region around the nipple is usually separated by a gentle furrow from the rest of the breast. The color of the nipple area is deep brown. The nipple is raised.

[304] Circumcision is not practiced by either men or women. Among the Heikum and Kung women I did not find the abnormally pronounced development of the buttocks, known as steatopygia, which
[144] is so common among Hottentot women. To my mind this is

/248 cont./

142

	Number of persons examined	Second toe extending farthest	First toe extending farthest	First and second toe extending farthest	Second and third toe extending farthest
Men	14	9	1	4	0
Women	17	11	0	3	3
Children	8	7	1	0	0
Total	39	27	2	7	3

151 I was also able to gather some data concerning physiological conditions. By means of Snellen charts, I discovered very keen sight for all the persons examined. Threefold visual keenness was attained by all those examined, and some had even higher degrees, up to sixfold.

The ticking of a watch could be heard at a distance of three meters by most of those examined.

I have frequently observed yawning among Bushmen.

48/ The gait of the Bushmen has something very characteristic about it; in walking, they raise the knees surprisingly high, a custom that is explained by the nature of the country. Because of the low and commonly thorny shrubs through which they travel with uncovered legs, they are forced to raise their legs quite high in walking, and they maintain this gait even when they are moving across ground that has no growth on it. In addition, the achievements of these small inhabitants of the bush on the march and in running are quite enormous.

●[147] Bushmen who had been sent out on patrols by the station covered a distance of 130 kilometers in less than 48 hours without displaying visible signs of fatigue. They followed the cavalry troop, which frequently broke into a trot, happily and without difficulty on foot, trotting themselves whenever the troop accelerated its pace.

201 /249/ Extreme astonishment is expressed by opening the mouth and eyes wide. I was able to observe this myself when I played a phonograph before the unsuspecting Bushmen. When the performance was over, the audience asked me whether the people who were in the apparatus and sang there also slept in it and received their food through the horn.

/259 cont./

342 are filled with grass. The door is a hole scarcely a meter high;
[354] immediately behind it the fire burns almost continuously, so that, at least for the European, crawling into the hut presents considerable difficulties. Since the Bushmen are often forced to
[361] move their settlements because of the lack of veld food or because of the water conditions, they not infrequently content themselves with incomplete huts, which are not closed to form a full circle, but represent only a part, a segment of a hut, as it were, and give only scant protection against the sun.

For the rest, it is astonishing how hardened these practically
● 147 naked Bushmen are against the cold of the night which during the cold season is very sharp -- not infrequently below 0^{0} [centigrade].
[513] Unclothed except for the loincloth, they calmly go to sleep on the cold ground near a small fire, exposed to the icy night air, a thought that gives chills to Europeans, who are unable to sleep without three woolen blankets on such nights.

Concerning the much discussed racial position of the Bush-
144 men, I have already remarked above -- at least concerning the Heikum and Kung -- that their descent from the Hottentots, as is frequently asserted, seems doubtful to me. The Bushmen's smaller size, of course, can be accounted for by the debilitation of the race through centuries-long unfavorable living conditions. What argues against the notion of racial affinity, however, is the anthropological fact that steatopygia is not to be found among
197 the Heikum and Kung women, /260/ and, in addition, the language is totally different.

I attempted to collect a sample of the vocabulary and some grammatical characteristics of the language of the Heikum on the Omatako and of the Kung in the Kaukau Veld, which I present below. In doing this, it became evident that the languages of the Heikum and Kung are merely dialectically differentiated, while they seem to have almost no relationship to the Nama language. The click sounds, to be sure, are almost the same as
[194] those in the Hottentot language; hence, / designates the dental
[104] click, // the lateral click, ! the cerebral [retroflex] click, and ≠ the palatal click. By ⋮ I designate the sharp opening of the glottis in speaking the initial vowel, which frequently occurs between a consonant and a vowel or between two vowels of the same word, and which does not occur in this fashion in the Nama.

×137 *Grewia retinervis* Burret (4875, 5066) Photograph 31.

!h5: Bushman.....	⊙b5:
ǁganakwe Bushman...	ǁ?ani
ǁgikwe Bushman.....	ǁgani
Naron Bushman.....	ǁgani
Eastern !khū Bushman	ǁgwa

A straggly many-stemmed five-foot shrub, sometimes a weak scrambler up to 10 feet high. The stems are half an inch thick at the base, rounded and slightly woolly when young, slightly flattened and glabrous when old, and tough and pliant. Its leavers are alternate, pale green, one and a half inches long and an inch wide, ovate with a pointed tip, toothed, and roughly hairy to the touch. They wither and fall soon after being frosted, but if out of reach of the frost remain on the bushes at least until the end of July. The plant bears spreading yellow flowers half an inch wide, and fruits the size of a pea, with a papery brown skin enclosing a few large pips and some fibrous mealy material. *Grewia retinervis* is closely allied to *Grewia flavescens*, so much so that I doubt whether the two should be considered anything more than varieties of one species. The differences are that *Grewia flavescens* is usually taller, and not so conspicuously veined on the upper surface of the leaves. Mr. B. de Winter, of the National Herbarium, Pretoria, has observed also that its older stems are square in section and those of *Grewia retinervis* are flattened.

Grewia retinervis was scattered over most of the area covered by the expedition, and common in the central Kalahari, specially in open grassy country. It has been recorded from the northern Cape and the Transvaal as well as South West Africa and the Bechuanaland Protectorate.

262 The fruits are edible. They ripen in winter, and have a slightly sweet (251 taste and a pleasant flavour. They may be stored after being dried, and 252) are then soaked or boiled before being eaten. The crop, if one may judge from the 1955 season, is abundant, and the amount fairly constant for all the bushes. The fruits form an important part of the Bushmen diet, [146 although little of them appears digestible. The roughage is voided almost 147] unchanged, in enormous faecal masses up to two and a half inches in diameter.

824 The dry stems of this plant nearly always contain the tunnelings of 372 grubs, and the tunnellings are packed with their excreta in the form of a brown, pith-like substance which forms a useful tinder. The Bushmen split the stems down the centre, make a slight depression in the flat surface and use this as a socket for the fire-drill.

×137 *Grewia* sp. aff. *Grewia bicolor* Juss. (5056).

Eastern !khū Bushman gamak'wɔ:

A slender shrub up to six feet high, with many sparingly branched stems. The leaves are one and a half inches by one inch, very finely toothed, dark green above and pale below, pointed at the tip and rounded at the base. Both surfaces are covered with a fine grayish felt which is thicker on the lower surface. Typical *Grewia bicolor* has wool on the lower surface only. The fruits are the size of a pea, and have a little flesh covering usually one big seed. No flowers were seen.

This is another of the plants with a distribution which begins in the Ghanzi area and extends northwards, and the remarks made as to the distribution and importance of *Grewia flavescens* apply here also.

[262] The fruits are edible.

9: Thomas T-5 (1951-1955)1959
FX10 Bushmen FX10

seen paintings, photographs, or drawings of any kind, the paintings they made for me could be said to resemble the paintings and engravings on the rocks.

If there is a resemblance, it is not surprising. The Bushmen, together with the Hottentot peoples, are known to have lived in South Africa long before the Bantus came. At one time it all was theirs to roam in, all the riverbanks and all the grasslands, all the hills and valleys where cedar trees grow, from the Cape to Rhodesia, from Angola to Mozambique. But during the waves of the early Bantu migrations, when the taller, energetic Bantu people with their chiefs and kings, witch doctors and armies of soldiers, their metal spears and axes, shields and maces, came walking down from central Africa driving their great herds of cattle before them, the Bushmen yielded their land to the stronger newcomers, after a few struggles, surely, and most of them were either killed, enslaved, or driven farther and farther back into the most remote parts of the country, where the Bantu people and their livestock could not live. But the Bushmen are very tough and hardy, all sinew and wire, with not an extra ounce of flesh to carry, and possess great endurance of hunger and thirst, endurance to search through the grass roots all day looking for a vegetable to eat, or endurance to chase the antelope they shoot, which may take as many as four days to die and may walk as far as a hundred miles if the arrow was not particularly well placed. Bushmen are extremely observant, too, and can follow the spoor of their wounded antelope over the hardest ground or recognize it among the spoor of a herd of other antelope of its kind, and if they miss the spoor and find it again, they know from individual characteristics of the footprint that it is their antelope and no other. Even a Bushman child walking along in the veld can tell his mother's footprints, can see at once the tiniest dry stalk among the grass

9: Thomas T-5 (1951-1955)1959
FX10 Bushmen FX10
GiKwe

A great thunderhead was rising in the west which would probably disperse before morning, and the sun set into it, turning the whole horizon a pale and delicate rose. We built up our fires and at the werf the Bushmen built up their fires and when it was dark our fragment of the veld was rather gay with firelight. A huge star, Fomalhaut, appeared in the south-east, as it did every evening. Tonight it looked as big as the moon and blue in the haze, but very dim, getting smaller and brighter as it rose. 123

Ukwane played his songs for us and said again that he would wait for our return, living beside our track, and if his son should come to visit him he would wait no longer but would follow our track to find us again somewhere.

We told him that under no conditions should he do any of this, for he would never be able to find us and we would probably never come back. He nodded, and we believed that he would not wait, but then again perhaps he did. Perhaps he is there now.

We got up before dawn in the morning and stamped out our fires and threw our bedrolls on top of the trucks. When it came, it was the pinkest dawn that I have ever seen and when the morning wind rose we shivered. I found a few coals left in a fire and tried to warm my hands, and when Wite saw what I was doing he crouched beside me and showed me how to pick up just one coal, roll it between the palms, and then hold the warm palms against the face. I tried it and of course was burned, but Wite patiently did it again and again, hoping that I would learn. His palms were flat and calloused almost as thickly as the soles of his feet. Twikwe, Tsetchwe, and Nhwakwe came to sit beside us and we waited together in silence until the trucks were ready. When I got up to go [47]

15: Marshall E-5 (1951-1961) 1965
FX10 Bushmen FX10
!Kung

guages, some now virtually extinct, were characterized by a fifth click made with the lips, called the kiss click (⊙). In addition to clicks, the Bushman languages have tones: high, middle, low, rising, and falling. Oswin Köhler has given special attention to tone as well as to other features in his study of Bushman languages, especially Barakwenga (Köhler 1962).

Each of the large divisions of the Bushman languages—the northern, central, and southern divisions (see Bleek 1956)—differs markedly from the others. Within each group are several languages, sometimes resembling each other enough to be considered merely dialects of the same language, but more often differing so widely as to be distinct, mutually quite unintelligible languages. The !Kung described in this chapter (Köhler's and Westphal's !Xũ) belong to the northern group.

HABITAT • The Kalahari Desert, some 1200 miles long, with a mean high altitude of about 3000 feet, forms part of the great plateau of southern Africa. It is a basin in form, covered with wind-blown sands, sometimes red, sometimes white, to a depth of 300 to 400 feet. The underlying rock crops out rarely in ridges and a few low hills.

Stamp (1953:78) classifies the Kalahari as a semidesert. Its conditions are not the most extreme. Our expeditions recorded daytime air temperatures in the shade up to 115° F. and sand temperatures in the sun up to 140° F. In winter the temperature at night falls below freezing but for most of the year the nights are temperate. Although they seem acclimated to the heat, the Bushmen appear to find the colder temperatures very uncomfortable and shiver violently if they are away from their fires when the cold south winds blow.[8]

The rainfall, which comes in summer thunderstorms—6 to 10 inches, increasing in the better-watered parts toward the north, according to Wellington (1955:61)—though slight, is sufficient to sustain a varied drought-resistant vegetation, and the country is covered with grass, brush, and scant small trees. In the northern and northwestern parts, the trees are more numerous and taller and include shivi groves and nut-bearing mangetti—important sources of food to the Bushmen. And in all the areas of the desert that Bushmen inhabit are found edible plants, in scant, far-apart patches perhaps, but existing. The vegetation, furthermore, provides material for fires, shelter, weapons, implements, tanning, poison for arrows, and juices (for example tsama melons, on which these people can live when there is no water). In short, this desert provides the things that make life possible; otherwise the Bushmen would be dead or somewhere else.

The desert is a forceful shaper of the outlines of Bushman culture, and both the possibilities it permits and the limitations it imposes have been meaningfully summarized by Robert Story in a personal communication:

15: Marshall E-5 (1951-1961) 1965
FX10 Bushmen FX10
!Kung

They hang meat in the bushes to dry and can keep it for some time. It is not uncommon for them to eat quite sparingly and save bits for a coming journey or against a future day of hunger, as they eat sparingly of mangetti nuts and *tsi* when they must make a supply they have carried from a great distance last as long as possible.

The !Kung are well accustomed to restraining themselves in regard to food. Thus when a visitor comes to a fire where people are preparing food or eating, he should sit at a discreet distance, not to seem importunate, and wait to be asked to share.

Although the hunters supply only about a fifth of the people's food and the women four fifths, the women play a dependent role in !Kung society. Nevertheless, the men do not ill-treat the women and require no extreme form of obedience or subservience of them.

The primary factor in the dominance of the men is undoubtedly strength. !Kung men are small and slender, but they are wiry and vigorous and, with their strength, they carry and protect the very life of their people.

Another factor that brings men clearly forward is the character of hunting and its reward. Women bring the daily food, but there is nothing splendid about returning with vegetables and wood. Many of the vegetable foods, furthermore, are rather tasteless and harsh and are not very satisfying. The return of the hunters is vastly different. The intense craving for meat, the anxiety that goes with the hunt, the deep excitement of the kill, finally the eating and the satisfaction reach to the very core of the people, engaging powerful emotions. Once a young man, /Qui, who was said to be the best hunter in the region, had been charged by a magnificent cock ostrich on a big open pan where there was no refuge. He knelt, facing the creature, until it was within close range and shot an arrow straight into its heart. Back in the werf, while the meat was being cut up and distributed by /Qui's wife's brothers, he slept exhausted on the mound of black and white plumes and the women—some of the plumes in their hair—danced a dance of praise around him. This is the role of !Kung hunters.

MATERIAL CULTURE

HOUSE TYPE AND SETTLEMENT PATTERN • The building of the scherm—the Bushman reed-and-grass dwelling—is women's work, associated with vegetation and gathering. Each woman builds for her own family. However, unless no better shade can be found or unless it is raining, the women often do not bother to build these shelters. Especially after the long days of walking, it is easier just to settle in the bushes.

In the Nyae Nyae region, wood and grass are everywhere, and a woman can gather her material and build her scherm in less than an hour. She breaks up flexible branches about six feet long, digs holes with her

15: Marshall E-5 (1951-1961) 1965
FX10 Bushmen FX10
!Kung

1951:26). In East Africa are sites indicating that people of common origin with Bushmen inhabited those regions, and this suggests that Bushmen in past ages migrated from the northeast (Schapera 1951:27) into South Africa, where they distributed themselves from the Zambesi River to the Cape of Good Hope. Hottentots also came into southern Africa—from East Africa in all probability—bringing with them herds of cattle. Bantu-speaking Negro tribes migrated into southern Africa, it is believed during the fourteenth and fifteenth centuries. White settlers began in 1652 to establish themselves at the Cape of Good Hope. Negroes, Hottentots, and whites encroached upon Bushmen, who were expelled from the better-watered lands or assimilated or exterminated. With the exception of a few individuals, the surviving Bushmen are found now only in the Kalahari Desert.

(3) The numbers of Bushmen found in various political divisions in 1955 as listed by Tobias (1956) are as follows:

Bechuanaland Protectorate	31,000
South West Africa	20,311
Angola	4,000
Northern Rhodesia	200
Union of South Africa	20

(4) Hooton classified Bushmen and Hottentots as a composite race, predominantly Negroid (1946:628) "whose racial ambiguity will probably continue to haunt us" (p. 633). [Cf. Schapera (1951:27), who says that it is generally regarded that Pygmies and Bushmen probably both diverged from a small variety of Negro; and Tobias (1961:19) who points out that no fossil remains have yet been found to provide definite evidence of this.] The resemblance of some of the physical characteristics of Bushmen to those of Mongolians is generally thought to be fortuitous (cf. Tobias 1957:4 ff.). Coon (1962:193) places the Bushmen among "tag-ends of ancient humanity, culturally as well as physically archaic," hard for classifiers to "fit into categories, let alone explain." The reader is referred to Schapera (1951) and Howells (1959) for judicious presentations of what is and is not known about these peoples.

(5) Studies on the adaptation of the Bushmen to heat and cold have been published by Wyndham and Morrison (1956).

(6) The nature of the Bushman hunt is graphically and empathetically portrayed in a most effective and widely acclaimed film, "The Hunters," made by Mrs. Marshall's son, John Marshall, while following !Kung hunters. Information about purchase or rental of the 70-minute film may be obtained from The Film Study Center, Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge 38, Mass.—Ed.

(7) I think that in the name relationship of the !Kung we can see the potential beginnings of a kin group. It would seem that it could be a *deme* if it existed. A deme is a name Murdock proposed for a bilateral endogamous local group, in the absence of unilinear descent, "comparable to the sib both in size and in the traditional rather than demonstrable bonds of kinship which unite

16: Lee E-5 (1963-1965) 1966 FX10 Bushmen FX10
!Kung

312
824 people were willing to walk in a single day for the purpose
222 of food gathering. In order to exploit food resources further than seven miles from water, the Bushmen feel that it is necessary to make a temporary camp at the food and stay overnight.

312
222 The options available to Bushmen facing such a situation are three: 1) they may carry water to the food and live there until their water is exhausted; 2) they may move to the food and dig water-rich roots to satisfy their moisture requirements; or 3) they may wait until rainfall produces standing water nearer the desirable foods.

312
147 There are no physiological short cuts to solving the water problem. There is no evidence that the Bushmen's daily water requirements are less than that of other peoples (Wyndham in press; Silberbauer 1965). Like all peoples, the Bushmen must drink water to live and their daily requirements are a function of such factors as ambient air temperature, wind velocity and the work they have to do[1] (Ladell 1958; Adolph et al. 1947).

---

[1]Ladell, a physiologist specializing in problems of human life in arid regions has said: "It can be categorically stated that no man of any race, however acclimatized and trained, can survive in a hot desert climate without very liberal supplies of water; there is, and can be, no substitute for water and there is no remedy for its deficiency". (1958:85).

2: Schapera E-4, 5 (no date) 1930
FX13 Hottentot
Bushmen FX10

arm is the shortest on record. In the Northern tribes measured by Seiner and Werner the index of span-breadth to stature is just over 100, whereas in Europeans it is about 103 and in the Central African Pygmies as much as 106. The hands and feet are very small and narrow in proportion, the fingers and toes short and stumpy.

The outline of the body is sunken and angular, and all projections are strongly marked. The shoulders are angular, and the shoulder-blades and collar-bones stand out very strongly, owing to the thinness of the muscles and the lack of adipose tissue in the skin. The chest as a rule is fairly well developed, though its appearance is sometimes vitiated by the variable conditions of the abdomen, and especially by the frequent occurrence of a pendulous belly, chiefly in young people, as the result of unfavourable diet, unrestricted gorging, and the frequent alternation between starvation and plenty. Where the food supply is at all regular, this abnormal protuberance is rarely seen. The buttocks are small but often seem prominent owing to the curious inward curvature of the spine in the lumbo-sacral region. The penis, even when not in a state of erection, often extends horizontally in a semi-erect condition. This remarkable feature, portrayed also in many of the Bushman paintings of human beings, has been regarded by some recent writers, such as von Luschan and Seiner, as a special racial characteristic of the Bushmen.

The Northern Bushmen do not differ very markedly in build from their Southern relatives, although the "Bastard" tribes are on the whole better developed physically. They have stronger limbs, with arms and legs slightly longer in proportion; the shoulders are more rounded, and the chest seen to better advantage. The protuberant abdomen and the marked hollow of the back due to the lumbo-sacral curvature are present in most individuals. The hands and feet are slightly bigger, the fingers and toes longer. The horizontal projection of the penis was noted by Seiner in about three-fifths of the men he examined. He states that with admixture of Bantu blood it begins to droop, so that there does appear to be some racial significance attached to this feature. Its occurrence has not yet been physiologically explained, although Seiner suggests that it may be due to a strong development of the *Ligamentum suspensorium penis*.

The female body, like that of the male, is generally slender, the limbs slight, the hands and feet small. In mature women, however, there is often found a strong accumulation of fat on the thighs and especially on the buttocks, a character known as steatopygia, which

2: Schapera E-4, 5 (no date) 1930
FX13 Hottentot FX13
Bushmen FX10

B 142 147

may occasionally be seen in the men also. Strongly-marked steatopygia is not very frequent, however, and in spite of the many statements to the contrary it cannot be regarded as a racial peculiarity. Fritsch, indeed, and other acute observers even look upon the occurrence of steatopygia in Bushwomen as indicating the presence of Hottentot blood. However this may be, it is certain that steatopygia is not as prominent a feature of Bushwomen as is sometimes asserted. In the Northern Bushwomen it seldom occurs.

The breasts in young girls are small and conical, with well-marked nipples; after puberty they become somewhat pendulous, and in the older women who have given birth to several children they hang very low and are often in an extremely shrivelled condition. The genital organs are notable for a frequent hypertrophy of the labia minora—the so-called "Hottentot apron"—which are sometimes considerably elongated, and may project as much as 10 cm. beyond the rima pudendi. This appears to be a physiological feature, and not artificially produced by manipulation, as has sometimes been suggested. It is found in the Northern tribes also, but is not peculiar to Bushwomen, since it is common among the Hottentots as well as among various East African peoples.

B 142 141

It will be seen from this description that all the Bushmen are on the whole fundamentally of the same physical type, although the Northern tribes vary in certain features from the Southern. It is impossible to draw any clear-cut line of distinction between the different tribes. There is rather a continuous gradation of characters, the type gradually becoming more impure the further north and east we go. The general tendency is for the Northern Bushmen to be taller, often considerably taller, than their Southern relatives; they have a darker colour, and better muscular development, relatively narrower and higher heads and faces, and show certain negroid characteristics in their facial features and bodily build. These divergent tendencies, it is evident, are the result of racial intermixture with other peoples, principally Bantu negroids; and the process of intermixture is still continuing. Seiner's designation of these Northern tribes as "Bastard Bushmen" is well founded, and there can be no doubt that they are all by now to some extent at least a hybrid people as far as physical characters are concerned.

Hottentots

H 141 142

The Hottentots resemble the Southern Bushmen very closely in appearance. It is only in stature and shape of the head that significant

2: Schapera E-4, 5 (no date) 1930
FX13 Hottentot FX13
Bushmen FX10

somewhat larger than in Bushmen, and while it does not display the same well-marked peculiarities as the Southern Bushman ear is, on the whole, strongly reminiscent of it, especially in shape and in the well-rolled helix. There is generally a moderate lobe, although occasionally the ear is lobeless, as in pure-blooded Bushmen. The lips are thin, the mucous membrane everted, and there is the same convexity of the upper lip as in the Bushmen. The lips project considerably, the lower slightly beyond the upper, giving the mouth a snout-like appearance, which may also be noticed in some of the Bushmen. This projection of the lips easily conveys the impression of great prognathism, owing to the flatness of the nose and the retreating chin; but actually the degree of prognathism is slight, although greater than in the Cape Bushmen.

In build there is also a great similarity between Hottentots and Bushmen. The bodies of the Hottentots are slender, and the limbs very slight; good muscular development is rare, the muscles generally being thin and cord-like. The legs are rather long in proportion to the trunk, while the arms, again, are short; the hands and feet are small and narrow, like those of the Bushmen. The hips project but little, and the protuberant belly seen in the Southern Bushmen does not occur to the same extent, although it is also often found in small children. The buttocks are small, but may appear prominent owing to the strong inclination of the pelvis and the hollow back, features already noted in the Bushmen as well. The horizontal position of the penis found in pure-blooded Bushmen is occasionally seen in the Hottentots, but is comparatively rare.

The breasts of the girls, like those of the Bushmen girls, are proportionately small and conical, with projecting nipples; but in mature women they become quite limp, and hang flat against the body. Steatopygia is far more common and more pronounced than in Bushwomen; it is found in the women of all the Hottentot tribes, although it tends to disappear where there is any great degree of intermixture with other peoples. Elongation of the labia minora is also very often found as a physiological feature. Although this cannot be regarded as a racial peculiarity, the fact is noteworthy that it occurs far more frequently in Khoisan women than in the women of any of the other South African peoples.

Relationship Between Bushmen and Hottentots

The Hottentots and Bushmen are so much alike in physical characters and so distinct in appearance from the other inhabitants of